

## **Effect of Insertion Loss due to the Detached Houses on Railway Wayside Noise**

Yoichi SAWAMURA    Toshiki KITAGAWA    Yukie OGATA

The effect of excess attenuation of railway noise due to detached houses is important in producing noise map. This effect is caused by reflecting or shielding noise by houses. The excess attenuation can be estimated by combining ASJ RTN-Model 2013, which is widely used in prediction on road traffic noise, with the noise prediction models of conventional and Shinkansen railways. Overall trends are well predicted in both the cases of conventional and Shinkansen railways. However, under prediction of up to 10 dB is found at some points in the case of Shinkansen railways. This could be because these points are so far away from the track that the model is not suitably applied at these points.